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BLAKELY HARBOR INTERPRETIVE PLAN

Storyline Opportunities

Theme

The changing nature of Blakely Harbor

Exploring the natural and cultural history of a unique Puget Sound harbor.

Note: Interpretive content described hereunder will be amended, expanded or reduced, and submitted for review in draft form and final copy during subsequent phases of the project.

ENTRY AND PARKING AREA

Area Description

A sign clearly marks the park entry for approaching visitors. After entering the parking area, visitors are drawn toward an anomalous shape in the gravel: A curb outlined in the gravel defines the “footprint” of the old cookhouse. Looking closer, they discover a description of the cookhouse etched into the concrete of the curb. This is the first indication that this is the site of an historic community.

Visitors are drawn from the parking area along a pathway toward the water, and pass near a shelter that contains restrooms, a drinking fountain, and storage. Graphic panels in this area provide general information about the park to visitors who pause to use the amenities.

WELCOME TO PORT BLAKELY PARK

Location

Near the entry to the parking lot and visible from the road.

Content

Place name, agency, and hours of operation.

Media

One-of-a-kind “monument” sign.

THE BLAKELY HARBOR PROJECT: A Sustainable Design

Location

On the restroom structure, grouped with other related panels, integrated into the character of the structure but mounted on a side away from the doors.

Interpretive Content

This project is the result of a public process and has been shaped by these desiderata:

- Assessment of enhancing jetty/lagoon environments for salmon
- Consideration of watershed and wetland issues
- Protection of relict plant communities
- Removal of invasive plant species
- Stabilization and preservation of mill remnants
- Redirection of circulation and traffic
- Interpretation of natural and cultural history
- Provision of visitor amenities—parking, restrooms, boat launch
- Installation of buffers for the neighborhood
- Application of a “light” hand in design and implementation

Media

Panel of digitally printed phenolic resin or similar material. Background image matches the color and grain of the walls of the restroom structure, with text and photos superimposed over the image. The panel is set into the paneling of the structure, integral to the walls.

INTRODUCTION TO SITE OFFERINGS: What's Here?

Location

On the restroom structure, grouped with other related panels, integrated into the character of the structure but mounted on a side away from the doors.

Interpretive Content

Where can I learn more?

- Clues to be found around Bainbridge Island about existence of former Blakely Harbor mill town
- Evidence of similar communities around Puget Sound

Media

Matches the "Project" panel described above. Contains an annotated map of the Island showing areas or facilities where additional mill-related information can be obtained, or where mill-related artifacts and remnant materials exist. A brochure rack offers a take-away tour map of the Island showing auto, bike and walking routes with historical points of interest.

WHO'S MANAGING THE LAND? and DONOR RECOGNITION

Location

On the restroom structure, grouped with other related panels, integrated into the character of the structure but mounted on a side away from the doors.

Interpretive Content

This project is an excellent example of community, state, federal, and tribal cooperation.

- Bainbridge Park and Recreation District
- State and tribal cooperation
 - Timber / Fish / Wildlife Agreement
 - State, tribal, sports and commercial fishing interests
 - Bainbridge community
- The tribe has rights under Usual and Accustomed Lands legislation
 - Harvesting practices are resumed
 - Historic cultural ways are protected and promoted

We gratefully acknowledge the support of the following individuals and businesses whose efforts made this project possible.

Media

Matches the "Project" and "Site" panels described above. Features the logos of all agencies affiliated with the project and photos of people from the various groups engaged in meetings, site work, or recreational use of the site. Images applied to the panel are imprinted with the names of donors and can be updated with additional layers.

ETIQUETTE: Guidelines for Your Stay

Location

On the restroom structure above the drinking fountain and clearly visible from the path.

Interpretive Content

Rules and regulations.

Media

Matches other regulatory signs in the Bainbridge park system.

HARBOR OVERLOOK

Area Description

Beyond the parking area, the trail leads visitors directly to an overlook above the harbor. Markers in the water and along the water's edge acquaint visitors with the layout of the huge wharf and mill that once occupied the banks of this small harbor. Looking inland along the shore, visitors will envision the mill town as it once appeared. Looking the opposite direction, they will see the refurbished power generating station on the far side of a tidal wetland. Graphic panels at this overlook feature historical photographs of the mill and town.

HISTORY OF PORT BLAKELY MILL

Location

Overlook of harbor and site.

Interpretive Content

This was a great place for a mill for several reasons.

The physical conditions offered a deep harbor, protection from wind, and ready access to Puget Sound, the coast, and nearby forest resources.

Proximity to shipping lanes facilitated carrying goods to market.

With Seattle close by, the mill could tap a steady labor supply.

The location fostered social connections with people from the other mill communities around Puget Sound.

Reuben Bean was the first white man to recognize the economic potential of the harbor.

Captain Renton established a mill here in 1863.

In the 1880's and 1890's, this was the "largest mill in the world."

Media

Panel of digitally printed phenolic resin or similar material. A railing-mounted panel with an array of historical photos, maps, and shipping documents, and an illustrated map of the historical mill, town, harbor, pond and nearby communities.

THE PEOPLE WHO LIVED AT THE MILL TOWN

Location

Overlook of harbor and site.

Interpretive Content

A microcosm of the Puget Sound region, the mill town was a typical industry-centered community with its stratified society of workers, merchants and other providers of goods and services, and managers.

The town was culturally diverse, with an initial population of native Suquamish and immigrants from the east coast of the United States, Nova Scotia, and elsewhere in North America.

Later arrivals came from China and Hawaii, followed by Japanese, Italians, Portuguese, Scandinavians, and others from around the world.

Observations at Blakely Harbor and around Bainbridge Island allow us to "read" remaining signs of the mill town in the cultural landscape.

On a walk down Seaborn Street, one can see historical home sites with several original structures, some intact and others modified.

Nearby, West Blakely contains evidence of historical occupancy. Pilings are still visible in the harbor, and filings from the mill are revealed at low tide.

The large concrete structure on the site is a small fragment of the last mill. Many Island buildings, roads, businesses, and farms owe their existence to the mill's timber products or its need for service.

Media

Matches the "history" panel above, and features a collage of historical portraits and contemporary Island photos.

CONDITIONS BEFORE THE MILL WAS BUILT

Location

Overlook of harbor and site.

Interpretive Content

The Puget Sound region is geologically young and volcanically active. Regional landforms are a product of plate tectonics and glaciation. Archaeological sites in the area provide information about early occupants. The Suquamish greeted the first Europeans.

Media

Matches the "history" panel above, and features an illustrated timeline of prehistoric and recent events.

BEACH TRAIL AND BOAT LAUNCH

Area Description

Following the trail downward to the water's edge, visitors emerge at the boat launch and a small interpretive area. Depending on the time of day or season of the year, fog may soften the outlines of the view and lend mystery to the scene, or sunlight may dapple the water as it laps against the shore. From this vantage, level with the water, it's easy to imagine the harbor in its various stages over time. Historical photographs of Indians gliding in a canoe to the shelter of the harbor, or of tall ships at anchor, help bring the scene to life.

LIFE IN THE HISTORIC HARBOR: Imagine the View

Location

At a small area near the boat launch, with a water-level view of the harbor.

Interpretive Content

The year is 1880. Imagine the scene: tall, three-masted sailing ships just feet from where you now stand, with crewmen crawling in the riggings, gangways crowded with men taking fresh supplies aboard, stacks of lumber swinging from winches overhead, and clerks and weighmasters working intently in their offices along the pier. Can you hear the hubbub and commotion?

Media

A poem inscribed in a rock or wooden marker.

THE HARBOR BEFORE, DURING, AND AFTER THE MILL

Location

At a small area near the boat launch, with a water-level view of the harbor, and interspersed along the route of approaching boats as they enter the harbor.

Interpretive Content

The thriving marine-based ecosystem has many interconnections.

Shellfish include mussels, chitons, snails, cockles, clams, and crabs.

Fish include salmon, sturgeon, steelhead, and eels.

Mammals include beavers, otters, and muskrats.

Birds include grebes, ducks, loons, cormorants, gulls, eagles, hawks, and ospreys.

Shrubs include elderberries, blueberries, and huckleberries.

Owing to the site's characteristics, it is likely to have been occupied either seasonally or permanently by the Suquamish people.

The Suquamish valued this place for many reasons.

They fished, hunted, and harvested shellfish here.

They collected plants for food, clothing, dyes, and medicines.

Construction and operation of the huge mill completely changed the harbor and its natural systems.

After the demise of the mill, the harbor rebounded to its present condition, which is managed as part of our ongoing stewardship.

Media

Images and verse inscribed in a rock or wooden marker. Markers with photopanel seen from canoes in the harbor.

CAPTAIN RENTON LOOP TRAIL

Area Description

Looping off from the Overlook, this trail carries visitors through the residential heart of the mill town, past the now vacant sites of the Masonic Hall, Campbell House, Renton House, and two mill worker houses. Markers at each of corner allow visitors to the outlines and scale of these structures. Visitors can compare the present landscape with the town and buildings shown in historical photographs posted near each structure along the trail.

LIFE IN THE MILL TOWN: Imagine the View

Location

Among the sites of former mill town buildings.

Interpretive Content

Historical records help us understand the major structures of the mill town, their functions, and the landscape in which they stood.

Differences in architectural styles expressed the difference in socioeconomic status, as seen in the Renton and Campbell homes, worker houses, and the quarters for bachelors and itinerants.

Non-native species were introduced, either deliberately as garden plants and ornamental trees and shrubs, or inadvertently as weeds.

Stories of daily life—history and memories—and personal links between the mill and contemporary Island folk.

Media

A trailside panel introduces visitors to the historical mill town and offers a brochure about the town and its occupants that includes a walking tour of Seaborn Street. Each of the mill town building sites is marked so that visitors can see the extent of the building's footprint. One of the markers at each of the sites bears an image of the building, its occupant's name or function, and a brief description. An optional audio program might allow visitors to hear the stories of people who remember, or have been told about, life in the mill town.

WHERE DID THE TOWN GO?

Location

Among the sites of former mill town buildings, where the trail meets Seaborn Street.

Interpretive Content

Brief description of the slow dismantling of the town, the decisions that led to it, and the attitudes of the people who were displaced.

Media

A trailside panel with an illustration of the declining mill town and photos of remaining houses.

REFURBISHED GENERATOR BUILDING

Area Description

Stablized, upgraded, and converted to a viewing shelter for visitors, the fragment of the power generating building will continue to be a significant architectural element on the site. From its prominent position at the head of the jetty, it offers visitors commanding views to the revegetated areas once occupied by the mill and town. New portholes in the walls of the building provide directed views that can be interpreted within the power station without impinging on site itself. Each porthole can be sighted toward a specific locale, such as the harbor, the town, the mill, the shipyard, or the wharf. Each view can be interpreted by an image of the scene as it appeared during the mill town occupation, perhaps printed on clear acrylic and mounted within the viewing porthole.

PORT BLAKELY MILL AND THE TIMBER HERITAGE CORRIDOR

Location

On an interior wall and visible to visitors entering the building.

Interpretive Content

In the late 1800's, the economy of Puget Sound, as elsewhere in western Washington, western Oregon, and northern California, was based on logging and milling, shipbuilding and shipping, and marine resource use.

The abundant natural resources that supported the industrial development of Puget Sound provided the economic impetus that attracted people to the region and ultimately led to statehood.

Mills such as the one at Port Blakely linked Puget Sound to Hawaii, China, Australia, Europe, and South America, as ships delivered lumber to those regions.

Regional economies grew up around the mills.

For example, farmers raised oxen to transport logs from the woods, dairies provided milk, and small towns supplied food, goods, and services.

Local governments entered into road-building agreements and created a system of roads, some of which we rely on today.

Port Blakely, along with all the other Puget Sound mills, formed the Boeing or Microsoft of the 19th Century.

Media

A wall-mounted graphic panel featuring a map of the west coast showing shipping routes and operating mills in the 1800's. An inset map showing trade routes to Hawaii, China, Australia, Europe, and South America, and photos of timber construction underway in those locations. And a population growth timeline for the west coast, tied to the harvesting, milling, and export of timber.

THE MILL AND HOW IT WORKED

Location

In the center of the site, with open circulation around all sides.

Interpretive Content

Self-sufficiency was important in a rural community—as much work as possible was performed locally.

The layout of the mill and its tasks.

How the mill was constructed.

How the mill worked.

Technologies brought change over time. Removal and replacement of older infrastructure challenges historians who try to recreate an accurate picture of the past.

“Gee whiz!” information about mill production.

Media

Large scale model of the mill, showing the internal and external workings and the people performing the various tasks. Small railing panels around the sides of the model.

MILL JOBS AND THE PEOPLE WHO HELD THEM

Location

On an interior wall of the building, opposite the mill model.

Interpretive Content

Immigration from Asia and Europe to Puget Sound was encouraged by the thriving economy and availability of jobs.

Waves of immigration resulted in a multicultural mill town population, which spread into nearby communities as workers and their families sought other jobs in fisheries, farms, and other fields of labor.

The mill jobs included:

- Management: Renton, Resident Manager.
- Skilled specialists: planers, filers, mechanics.
- Laborers to feed logs and move lumber and stevedores to load the ships. Mostly Suquamish, Chinese, and Japanese, who might move up into skilled jobs.
- African Americans were scarce in the Puget Sound region.

Media

“Family of man” photo collage on wall.

INFLUENCES OF THE RAILROAD

Location

On an interior wall of the building, near a porthole that faces Yama or Nagaya.

Interpretive Content

The arrival of the railroad had a significant impact on the mills of Puget Sound. Forces leading to political and economic change traveled to the region via the railroad.

- Scandinavians came by railroad.
- The architectural styles of buildings, such as those seen on historical Seaborn Street, changed.
- New technologies were imported that permitted reaching deeper into the forested hills and mountains for timber, and at a faster rate.

Thus, beginning in the 1870's, new arrivals caused the community to grow rapidly. In the 1890's, the Japanese communities of Yama and Nagaya added to the multicultural mix at the harbor. Lumber from the Port Blakely Mill reached ever farther afield, destined to be used in construction in far-off ports.

Media

A wall-mounted graphic panel featuring historical logging photographs and photos or illustrations of immigrants from Scandinavia, Japan, and elsewhere.

DEMISE OF THE MILL: Causation and Process – Where Did it All Go?

Location

On an interior wall of the building.

Interpretive Content

With changes to the global and regional conditions that had led to the original flowering of mills, the fortunes of the mills declined.

New markets, new technologies, and competing forms of transportation eventually drove the Blakely Harbor mill out of business.

Where is the timber that went out from here to far-flung locales?

There are surviving links in other countries, where structures still exist.

Which local structures were built from timbers at Port Blakely Mill, and where can they be seen?

Which houses and other buildings were moved off the site but remain in use, and where can they be seen?

Where are the people?

Media

A wall-mounted graphic panel featuring historical and contemporary photos of buildings constructed with lumber from the mill, a map of areas of the Island where relocated buildings are extant, and photos of interviewed Island residents.

NORTH JETTY TRAIL

Area Description

An elevated boardwalk constitutes a significant portion of this trail as it crosses tidal wetlands to the old power generating building. The trail culminates at an overlook of the jetty from the north bank. From the elevated structure, visitors can easily view the mill pond and the length of the harbor and its historic surroundings. They also have a clear view of the Puget Sound in the distance.

THE HISTORICAL MILLPOND: Imagine the View

Location

On the boardwalk looking toward the millpond.

Interpretive Content

Millponds are an integral part of lumber mills.

Storage for hundreds of raw logs.

Mill activities degraded the pond habitat.

Media

Icons and words carved into the railing or decking of the boardwalk.

EFFECTS OF MILL AND TOWN ON HABITAT AND RESOURCES

Location

North jetty overlook.

Interpretive Content

Physical changes to the shoreline and estuary—logs, pilings, buildings, and infill—affected fish runs and predator/prey relationships.

The jetty/lagoon affected water flow and the type of habitat available for salmon rearing.

The jetty affected the tides, creating pulsing cycles as water rushed through the jetty outlet.

Passing ships generated low frequency waves that hit the beach.

Chemicals from sawdust dumping, filings, and the jetty construction polluted the ecosystem.

Tidal cleansing helped reduce the impact.

Roads that cut through plant communities and clearing for construction caused erosion and sent silt into streams.

Native vegetation was cleared for mill and town buildings, making way for invasive species.

Today, the site is largely restored, and wildlife once again uses the harbor.

Media

A railing-mounted panel of phenolic resin, matching the panels at the orientation overlook.

TALL SHIPS FROM MANY PORTS: Hall's Shipyard

Location

North jetty overlook.

Interpretive Content

In its heyday, this harbor was alive with an astonishing array of ships. Hall's Shipyard provided services to the mill and the region.

Media

Photo images mounted within rocks at the water's edge.

HONEYMOON TRAIL

Area Description

Named for the mill town cottages for sea captains and their families that once stood here, the trail winds through a low meadow on the verge of the millpond. Mill workers living in the nearby communities would have passed this way daily.

MILLPOND HABITAT: Life in the Mudflats

Location

Off the trail overlooking the mudflats.

Interpretive Content

TBD

Media

A two-part trailside panel comparing a cutaway illustration of the mudflats and the life they support with the flats as they appeared during the era of the working mill.

MILLPOND HABITAT AND THE NAGAYA COMMUNITY

Location

Off the trail in the meadow.

Interpretive Content

Nagaya was a community of Japanese mill workers and their families.

There were orchards in the fields near the pond.

The ability of the millpond to provide habitat for wildlife has rebounded in recent years.

Media

A two-part trailside panel comparing the meadow when it was used by the mill community with the meadow in its existing condition as restored wildlife habitat.

WEST BLAKELY TRAIL

Area Description

The path crosses a small bridge and runs along a beautiful ravine of native forest before leaving the site. It then crosses Blakely Avenue, and in the future may proceed uphill to connect with the Port Blakely Cemetery, the Puget Sound Environmental Learning Center (not open to the public), the West Blakely neighborhood, an Island trail system, and future parklands.

CONDITIONS BEFORE, DURING AND AFTER THE MILL:

Salmon Stream Restoration

Location

On the trail into the ravine.

Interpretive Content

Historically, these small streams were habitat for wild salmon.

During and after mill operation, changes to the site altered the ability of small streams to support salmon runs.

Where feasible, these runs are being restored.

If you look closely, you'll see how we have amended conditions along the stream.

Salmon and other fish are once again running here.

Media

Icons and words carved into the railing or decking of the boardwalk bridge, at the trailhead to West Blakely Trail.

YAMA TRAIL

Area Description

The trail leads to the off-site location of the historical Yama community, which is not visible from this vantage. The trail to the historic Archaeological Conservancy Site may be accessible at a later time and may also lead to the Fort Ward neighborhood and Fort Ward State Park.

Location

In the meadow, at the trail intersection leading to the old Yama site.

Interpretive Content

As various cultures arrived at the site, they brought some of their traditions with them intact, and adapted or developed others appropriate to their new home.

Yama was among several Japanese communities that grew up around Puget Sound.

Although they lived apart from the mill town, the residents of the Yama community, with their farming, gardening, and orcharding skills, helped shape life at the harbor.

Japanese families remain on the Island and are an integral part of its history.

Media

A two-part trailside panel comparing the meadow when it was used by the Yama community with the meadow in its existing condition as restored wildlife habitat.

THE SAWDUST LEAGUE

Location

On an interior wall of the building.

Interpretive Content

The Sawdust League baseball games were a memorable feature of life at the mills.

They provided a social experience that created bonds and rivalries between the mills.

The games were played on a culturally "level" playing field.

Players and families traveled by chartered boat to the games.

The games led mill owners to install a telegraph system so scores could be relayed.

The Sawdust League was typical of the American lifestyle at the turn of the 20th century.

Media

A wall-mounted graphic panel illustrating the exuberant Sawdust League.

SOUTH JETTY TRAIL

Area Description

Markers in the landscape point out where the structure bearing overhead cables ran. The trail focuses on the ship-building yard, satellite communities, and the baseball field.

LIFE IN THE HISTORICAL LANDSCAPE: Imagine the Harbor from Here

Location

South end of the jetty overlooking the harbor and the mill site.

Interpretive Content

Imagine the scale of the mill in the harbor.

Overhead cables carried materials across the harbor to the south side, where shipyards and other services stood.

The Sawdust League's baseball field was located here.

At various times, other groups of people occupied this side of the harbor.

Today it's possible to enjoy the tranquility of this spot and the distant views to Seattle.

Media

A two-part trailside panel comparing the jetty when it was built and used by the mill with the jetty today. And historical photos mounted to markers, showing where key elements of the mill once stood.

BLAKELY HARBOR INTERPRETIVE OUTLINE			
Preliminary Storyline Opportunities			
<i>Theme: The Changing Nature of Blakely Harbor: An example of the natural and cultural changes that have occurred, over time, in the Puget Sound</i>		The Portico Group with SVR Design Company and Jan Eakins	
ARRIVAL & WELCOME		Possible Media	Possible Location
		Entry sign w/ name & timeline	Entry drive @ parking lot
PARKING / RESTROOMS / SITE ORIENTATION			
Watershed stewardship: Historic mill site now revegetated		Sign panel	Near or at restrooms
You can read the signs in the birdscape - here's what to look for		Pavement markers	Parking lot pavement
Example: Cook house site at the parking lot		Sign panel	Near or at restrooms
The public process			
Interpretation of the natural and cultural history			
Amenities for visitors: parking, restroom, boat launch			
A "light" hand in design and implementation			
Assessment of jelly/Lagoon environments for salmon			
Watershed and wetland issues			
Protection of relic plant communities and removal of invasive species			
Buffers for the neighborhood			
Stabilization of mill remnants			
Redirection of circulation and traffic		Sign panel	Near or at restrooms
Bainbridge Parks and...?			
State and tribal cooperation			
Timber / Fish / Wildlife Agreement			
State, tribal, sports and commercial fishing interests			
Bainbridge community			
Tribal rights under Usual & Accustomed Lands legislation		Sign panel	Near or at restrooms
to be developed		to be developed	
ORIENTATION OVERLOOK			
How the island and harbor watershed were formed		Sign panel	On railing at orientation overlook
Puget Sound formed by glaciation		Native stories and illustrations	
750 YA Blakely Rock (rose 20' in harbor, as earthquakes in Japan caused tsunamis and uplift, forming the harbor		Early harbor map	
Thruvna "coastal" ecosystem - how it worked (works?)		Nate's coast survey map	
Marine-based life: Musseles, chiltons, snails, cockles, clams & crabs			
Salmon, sturgeon, steelhead and eels			
Beaver, otter and muskrats			
Gelebs, ducks, loons, cormorants, gulls, eagles, hawks & osprey			
Elderberry, huckleberry, huckleberry, Other		Village sites map, quotations from oral histories	
Resource use by the Squamish? Why they value this place (verify)			
Due to the sites characteristics, it's likely to have been either a seasonal or permanent occupation site			
Shellfish harvesting, fishing, and hunting			
Medicinal, food, clothing and dye plants			
Leisure and ceremony			
Harmony			
Great Place for a Mill			
Physical conditions: Wind protection, deep bay, Puget Sound access, temperate rainforest resources nearby			
Social Conditions: Socially connected with other mill communities and Seattle by road and steamship		Sign panel	On railing at orientation overlook
Reuben Bean			
Reuben's last stand - "Largest mill in the world"		Sign panel	
to be developed (Eiffel Tower and Washington Monument being built)		Sidebar to previous sign panel	
A microcosm of conditions within the Puget Sound region: stratified society living in specific areas of the community		Interactive sign panel & brochures	On railing at orientation overlook
A culturally diverse community of local residents and immigrants that changed its composition over time			
Non-immigrants included Squamish, and workers from the East Coast and Nova Scotia			
Chinese and Hawaiian, followed by Japanese, Italians, Portuguese, Scandinavian & others came from around the world		Various historic photos incorp. @ panels	
Creation of major structures, landscape features, and their functions			
Company incentives enticed skilled workers, families offered subsidized rents, land & lumber for home const.			
Differences in architectural styles: Repton and Campbell homes, worker houses, itinerant and bachelor quarters			
Gardens, landscaping and introduced species, ornamental trees are planted			
Wharfs, piers and warehouses, roads, and the mill itself		Map of Old Mill Road	
Relationships developed between the mills and regional governments for road maintenance, etc.			

From: Daley Design
To: Nate Thomas ; ywulff@bainbridgeisland.net ; terrym@pselc.org ; Steve Morse ; joan@piperpiper.com ; gangmark.carolyn@epa.gov ; expresstpb@aol.com ; frank stowell ; csnyder@adobe.com ; bart@bainbridgeisland.net ; Perry Barrett
Sent: Tuesday, September 18, 2001 11:14 AM
Subject: Re: Portico Report

In the last few days I have spent a significant amount of time reviewing technical documents on the type of substrate and habitat that is critical for the maintenance of insect populations and forage fishes that are important sources of food for juvenile salmonids. There are many documents, including the just released document edited by Jim Brennan that relate to the importance of mud bottom substrate in addition to gravel beaches. In addition I have reviewed the aerial photos of the Harbor that date back to the 1930's. Some of the technical issues that are evident from my research are as follows:

The pond behind the jetties is functioning in a positive manner as a recovered mud flat habitat.

The function of the jetties has not changed with the recent placement of rock on the jetties. Review of historical aerial photos clearly shows an identical flow pattern to the existing conditions.

Mud flats are also an important natural function in estuaries.

The area has stabilized with little or no human interference over the last 90 years.

This area can continue to function as an important research area for evaluation of the potential for recovery of disturbed habitat without removal of the jetties.

We can add features of enhancement to the log pond with the proper placement of logs and old rootwads. This effort, however, needs to be done in a carefully researched manner.

The proper process for removal of the jetties would require careful and expensive studies of the hydraulics and topography of the shoreline to insure that the changes do not cause serious damage to the shorelines outside the jetties. Total cost for these studies would be in excess of \$100,000.

The salt marsh adjacent to the concrete building can be enhanced and maintained with the proper use of trails in the area. It is not unreasonable to think that the salt marsh area can be left intact and enlarged and beach access limited to areas outside the perimeter of the marsh. Boater access to the east can be limited with attractive cedar rail fencing isolating the saltmarsh.

It is critical that this park be a center of learning and an example of how to allow the public to observe an area that is recovering from the impacts of industry. The trail system will need careful consideration in this respect to minimize or eliminate the potential impacts indicated in Jim Brennan's report.

Please call if there are questions or concerns.

Wayne Daley

**A Review of Natural Resource Values and
Restoration Opportunities
at Blakely Harbor Park:
Balancing the Scale**

**Report prepared for the Bainbridge Island Park District,
City of Bainbridge Island, Washington**

Prepared by Jim Brennan

July 2, 2001

A Review of Natural Resource Values and Restoration Opportunities at Blakely Harbor Park: Balancing the Scale

Introduction

The City of Bainbridge Island is located on the western shore of the central Puget Sound basin. Much of its character is defined by the fact that it is an island surrounded by the marine waters of Puget Sound. Puget Sound is the second largest estuary in the United States and is renowned for its natural resources and aesthetic qualities. Estuaries are considered by many to be the most productive ecosystems in the world, supporting diverse populations of plants and animals. Because many marine and terrestrial species depend on these ecosystems for all or a portion of their life cycles, estuaries are often referred to as “nurseries of the sea” (WADNR 1998). Over time, human activities have disrupted the ecological balance of Washington’s estuaries and decreased their productivity. Dredging, filling, armoring, shoreline construction, water pollution, transportation, commercial, residential, and recreational activities have resulted in the degradation and loss of marine habitats and species.

Estuarine and coastal wetlands are the most ecologically diverse and seriously threatened wetlands on the Pacific Coast. These wetlands provide important habitat such as eelgrass beds, salt marshes and mudflats. These wetlands provide essential habitat for 75 percent of the state’s commercial fish and shellfish. Yet, estuarine habitat loss has been extensive. For example, since Euro-American settlement, coastal urban areas have lost 90 to 98 percent of their estuarine wetlands (WADNR 1998).

Although Bainbridge Island contains a relatively small portion of the 1330 miles of marine shoreline in Puget Sound, it plays a critical role in supporting numerous marine habitats and species. Land use, aquatic use, and shoreline management practices on Bainbridge Island have resulted in extensive historical loss and degradation of nearshore ecosystem processes and functions. Shoreline armoring, filling, overwater structures, commercial and residential development, roads, failing septic systems, wastewater and stormwater outfalls, and other practices dramatically changes habitat structure and can alter species composition and habitat utilization in the nearshore environment. Numerous studies have identified these activities and the resultant adverse impacts to marine habitats and species (e.g., WADOE 1994; Canning and Shipman 1995; West 1997; Broadhurst 1998; Lynn 1998; WADNR 1998; Thom and Borde 1998; Zelo et al. 2000; Williams et al. 2001; Nightingale and Simenstad 2001). These activities and others have led to adverse impacts and significant population declines in fishes, birds and marine mammals. They have also led to petitions for increased protection, or listing of species for protection under the Endangered Species Act (ESA). These actions should be a clear indication that the health of the marine ecosystem is in jeopardy.

In order to respond to the threats that have been imposed on the marine ecosystem, numerous local, regional, state and federal efforts are being implemented to protect, restore and enhance marine habitats and species. To be effective, local planning efforts should be familiarizing themselves with the issues and incorporating best available science and best management practices into development activities. These efforts should include individual projects related to roads, stormwater, parks, and commercial and residential development in shoreline areas. In addition, there should be coordination between planning for individual projects and larger scale planning efforts, such as the Shoreline Master Plan, Salmon Recovery Planning and related activities, Sensitive Areas Ordinance, Comprehensive Plan, and Harbor Management Plans.

The purpose of this paper is twofold: 1) To identify and describe some of the natural values and restoration opportunities that may not have been fully, or adequately considered in the design and intended use of the park; and, 2) To encourage improved understanding and coordination between individual projects, such as Blakely Park, and larger scale planning and conservation efforts. My hope is that this information will provide a basis from which more informed decisions can be made toward the development of a park plan.

Background

Blakely Harbor and the Blakely Park site at the head of the harbor comprise one of the most unique and resource rich sites remaining on Bainbridge Island. This is due, in part, to the ecological characteristics and relatively low level of development at this site. This site was targeted for purchase because of its high natural resource and aesthetic values. It is also the site of an historic landmark, the Port Blakely Mill. Since the mill was closed, and most of the man-made structures were removed, the site has remained relatively undisturbed for approximately 70-years. As a result, this site has been “healing” itself naturally and now contains a salt marsh and other features that are of high natural resource value. This “natural healing” process over an extended period quite possibly offers one of the most valuable features of this site; an opportunity for preservation, continued restoration, and an advancement in our understanding of how systems recover naturally after intensive human use and alteration. To my knowledge, this feature is not one that has received much attention or discussion in the development of a park development proposal. This is an unfortunate oversight for several reasons including:

- 1) The vast majority of subestuaries in Puget Sound have been lost, or significantly altered as a result of human development practices
- 2) The lack of long-term monitoring and assessment limits our ability to understand how to properly restore such systems
- 3) There are few subestuaries that remain in “pristine” condition and we therefore have few, if any, good reference sites
- 4) Park development could disrupt ecological processes, structure and functions within the system
- 5) Park planning is not linked to broader-scale efforts to develop City-wide and

Puget Sound-wide watershed planning, salmon recovery, and the development of revised critical areas ordinances, shoreline master program and comprehensive planning.

Recognizing the importance of the above-mentioned issues enhances our ability to make informed decisions that improves on the economic and environmental success and viability of a project. Unfortunately, the development of parks usually focuses on the human-use aspects and often neglects, or underestimates, ecological, resource, and aesthetic values. Even where an attempt is made to “balance” human use with mitigation or preservation of some natural features, each action taken to alter natural processes and functions results in a loss that contributes to cumulative adverse effects. I have written a brief description of some of the resource values and opportunities for an improved and more coordinated park plan below in an attempt to provide a broader perspective. I am hopeful that this information will expand the park plan discussion to include broader resource considerations and a more realistic understanding of a balanced approach to park development.

RESOURCE VALUES

Embayments/Subestuaries

The main basin of Puget Sound is technically an estuary, due to its physiographic features and salinity that is measurably reduced by upland runoff. The physical structure of streams, rivers, and estuaries plays a significant role in determining the suitability of aquatic habitats to salmonids as well as other organisms upon which salmonids depend for food (Spence et al. 1996). Embayments such as Blakely Harbor are often considered subestuaries because they have a freshwater stream associated with a tidally influenced, semi-enclosed body of water. Subestuaries are typically extremely rich in nutrients and species composition. Both the high nutrients and the composition of species result from multiple physical, chemical and biological processes that form and maintain habitat. Subestuaries act as nutrient sinks due to their low energy regimes and multiple sources of nutrient input. Nutrients are delivered or transported to subestuaries via tides (marine/estuarine nutrients), freshwater streams, salt marshes, tidal wetlands, and riparian zones surrounding the subestuary. The high level of nutrient availability typically translates into high productivity, where primary producers and consumers make nutrients available to higher trophic levels. For example, nutrients delivered to the system are taken up by primary producers, such as diatoms, salt marsh vegetation and eelgrass. These, and other sources of organic matter, such as leaf litter, wood and detritus, are consumed directly, or broken down by converters/primary consumers (e.g., fungus, bacteria, benthic and epibenthic invertebrates), who, in turn, become prey for secondary consumers (e.g., fishes, larger invertebrates, birds, mammals).

The importance of subestuaries is illustrated by their high level of productivity and importance as refuge and feeding areas for multiple species of fishes and wildlife. Salmonids depend heavily upon subestuaries for feeding, refuge, and physiological transition as they make their way from their natal streams to the ocean. The importance of Blakely Harbor to salmonids is illustrated in the catch records of a study conducted by Jones and Stokes (1992) for the Port Blakely Mill Company. In the spring of 1990, a beach seining study conducted at six sites caught a total of 444 juvenile chinook (*Oncorhynchus tshawytscha*), 891 chum (*O. keta*), and 6,400 pink (*O. gorbuscha*) salmon. Coho salmon (*O. kisutch*), cutthroat trout (*O. clarki clarki*) and numerous other fishes and invertebrates were also captured.

Salt Marsh/wetlands

Generally, salt marsh functions are similar to those commonly listed for wetlands, including; fish and wildlife support, groundwater recharge, nutrient cycling, flood attenuation, and water quality improvement. Functions demonstrated for tidal marshes in the Pacific Northwest are as follows:

- Primary production
- Juvenile fish and invertebrate production support
- Adult fish and invertebrate foraging
- Salmonid osmoregulation and overwintering habitat
- Water quality
- Bird foraging, nesting, and reproduction
- Wildlife habitat
- Detrital food chain production
- Wave buffering

Salmon forage on prey resources produced in, and imported to, the marsh system (Shreffler et al. 1992). Significant growth of juvenile salmon residing in these systems has also been reported. Prey resource production has been documented in small, restored tidal marshes in the Duwamish Estuary (Simenstad and Cordell 2000).

As an example of tidal marsh habitat utilization, the Gog-le-hi-te system was shown to be used by 118 bird species within the first five years of its existence (Simenstad and Thom 1996). Grazing of marsh vegetation by waterfowl is common, as is foraging of fish by great blue heron and kingfishers. In general, shorebirds procure invertebrate prey and raptors feed on fishes, small mammals, amphibians, and reptiles. In addition, passerines such as red-winged blackbirds and marsh wrens nest in tidal marshes (Simenstad et al. 1991).

These systems are vulnerable to physical disturbances by human actions (e.g., trampling, filling, dredging, hydrologic constriction, boat wakes) as well as chemical contamination. Debris, such as plastics and other man-made materials, can accumulate in tidal marshes, which can bury and smother marsh plants (Thom et al. 2000).

The types of salt marsh vegetation found during a brief survey of the Blakely Harbor site included; tufted hairgrass (*Deschampsia caepitosa*), saltgrass (*Distichlis spicata*), pickleweed (*Salicornia virginica*), gumweed (*Grindelia integrifolia*), seaside plantain (*Plantago maritima*), saltweed (*Atriplex patula*), saltmarsh sandspurry (*Spergularia marina*), and fleshy jaumea (*Jaumea carnosa*).

Mudflats

Mudflats are important areas for nutrient cycling, primary and secondary production, and provide habitat for numerous species of fishes and wildlife. Studies conducted in Puget Sound and other Washington estuaries have determined the following functions for flats:

Primary production

Nutrient cycling

Habitat/support for juvenile and adult fish

Bivalve and crustacean production

Prey production for juvenile salmon, flat fish, and shorebirds

Detritus sink

Predator protection for sand lance and invertebrate infauna

Wave dissipation for salt marsh

There is commonly a dense flora of microalgae, primarily diatoms, which inhabit the fine sediments of flats. This microalgae, along with phytoplankton, eelgrass, macroalgae, salt marsh vegetation, and riparian vegetation provide the primary nutrients for the system. Bacteria, fungus, and a diverse array of invertebrates consume, or break down these nutrients, making them available to other organisms. Juvenile salmon prey species have been shown to be seasonally abundant on flats and their distribution is linked to the benthic microalgal abundance (Thom et al. 1989) and other prey production (e.g., harpacticoid copepods).

Invertebrates are abundant and assemblages vary throughout the Blakely Harbor site, their distribution determined by substratum type and salinity. Tidal flats contain numerous invertebrates and fish and are used by shorebirds, herons, raccoons, otters, and other organisms as important foraging areas. Fish species that feed on invertebrates from flats include salmonids, bay goby, Pacific staghorn sculpin, English sole, sand sole, speckled sanddab, and starry flounder (Simenstad et al. 1991).

Shorebirds are commonly observed feeding on flats in the Pacific Northwest. Studies in Grays Harbor (Herman and Bulger 1981) and Padilla Bay indicate that the birds are consuming invertebrates produced on the flats. American Widgeon, Black brandt geese, and Canadian geese preferentially eat seagrasses *Zostera marina* and *Z. japonica*, which grows on tide flats in many areas of Puget Sound. Other birds that feed on flats include the bufflehead, common goldeneye, horned grebe, common snipe, dunlin, great blue heron, and the least and western sandpipers (Simenstad et al. 1991).

Riparian Functions

Riparian zones constitute the interface between terrestrial and aquatic ecosystems. They perform a number of vital functions that affect the quality of aquatic and terrestrial habitats as determined by physical and biological composition. Riparian-aquatic interactions are now recognized by scientists as so important that riparian buffers have been established as a central element of forest practice rules and watershed restoration efforts (Spence et al. 1996). Riparian vegetation composition, density and continuity are some of the most important characteristics of riparian systems. Most of what we know about riparian functions and values comes from investigations of freshwater systems, which have been the subject of extensive research. Although marine riparian zones have not been subject to the same level of scientific investigation, increasing evidence suggests that riparian zones serve similar functions regardless of the salinity of the water bodies they border (Desbonnet et al. 1994) and are likely to provide additional functions unique to nearshore systems (Brennan and Culverwell in prep). Riparian functions that are known or likely to contribute to nearshore ecosystem health include protection of water quality and bank stability; provision of wildlife habitat, microclimate, and shade; and input of nutrients and large woody debris.

Early forestry practices and land clearing for development have significantly altered the abundance, composition and continuity of riparian vegetation along our shorelines. This has resulted in increased soil erosion, reduction of water quality, wildlife habitat, organic nutrients available for the marine system, shade in the upper intertidal zones, and habitat complexity. The removal of native vegetation also often results in the establishment of non-native/invasive species of plants, monocultures, and early successional forest characteristics. Each of these changes can result in dramatic shifts in fish and wildlife habitat and species composition.

The maintenance and/or enhancement of the riparian zone in Blakely Harbor is important for maintaining its functions and values relative to a healthy nearshore ecosystem. Park planning should strive to enhance the riparian vegetation and maintain wide buffers around the shoreline to protect the aquatic ecosystem.

Wildlife

The abundance and diversity of wildlife known or expected to occur at the Port Blakely Park site is one of its most impressive characteristics. The following list of wildlife taxa is drawn from Jones and Stokes (1992). The lists of specific species for each taxonomic group may be found in their report.

Amphibians	11 species
Reptiles	6 species
Birds	200 species
Mammals	49 species

Most, if not all, of these animals are dependent upon the wetlands, streams, marshes, riparian zones, marine waters, and associated functions found at this site for their survival and vitality during some part of their life history. Human disturbance and alteration of their habitat has the potential of reducing their presence and use of this area.

Fishes

Fishes are another group of animals that provide a good indication of the importance and productivity of Blakely Harbor. The following is a list of fish species collected during 1990 beach seining surveys conducted by Jones and Stokes (1992) for the Port Blakely Mill Company.

Chinook salmon	Coho salmon
Chum salmon	Pink salmon
Coastal cutthroat trout	Juvenile flatfish spp.
Juvenile cod	Juvenile smelt
C-O sole	Rocksole
English sole	Dover sole
Starry flounder	Pacific herring
Surf smelt	Pile perch
Shiner perch	Striped perch
Pacific staghorn sculpin	Juvenile sculpin spp.
Threespine stickleback	Gunnell spp.
Bay pipefish	Snake prickleback

The most impressive point to note from this survey is the total catch of salmonids: 444 juvenile chinook, 891 chum, and 6,400 pink salmon. It was also noted that an estimated several (>10) thousand juvenile salmonids were observed feeding and jumping in about a 5-acre area of the inner harbor (Jones and Stokes 1992). I have made similar personal observations of juvenile salmon and/or large aggregations of herring feeding in the inner harbor at a time that coincided with large swarms of euphasiids.

While not well studied, these limited studies and observations are a testament to the productivity and value of the Blakely Harbor site. Because of these qualities, the protection and restoration potential at this site should be given special emphasis, especially when considering the current salmon crisis and the level of development and habitat degradation at other embayments on Bainbridge Island.

OPPORTUNITIES

There are a number of opportunities to increase the value, utility, and success of Blakely Park development. Park planning and development should be linked to other ongoing planning and restoration processes. The primary driver in this recommendation is to establish consistency, efficiency and cost effectiveness. The list of “opportunities” below is simply a list of projects and planning efforts that I am familiar with and is not intended to be exclusive of other opportunities to coordinate and collaborate with other efforts.

- 1) Connectivity to other restoration efforts (e.g., Mac’s Pond and stream).
- 2) Congruency with SRFB goals (identification and implementation of nearshore restoration projects). Meeting similar goals has the potential of acquiring funds for restoration.
- 3) Congruency with Shoreline Master Program Update, Sensitive Areas Ordinance, Growth Management/Comprehensive Plan. Each of these plans provides for the identification and protection of areas that are of particularly high resource value, or sensitivity to development impacts. It simply would not make sense to plan the park without reference to these other efforts.
- 4) ESA compliance/salmon recovery planing. The City of Bainbridge Island is surrounded by marine waters that have been designated “critical habitat” for chinook salmon under the ESA. Any park development plan would be remiss if it did not consider these federal regulations and what actions the City might take in response to this listing.
- 5) ACOE General Investigative Studies (Nearshore Assessment and Restoration). The Army Corps of Engineers is developing a program for Sound-wide assessment and ecosystem restoration that is looking for restoration opportunities. This site has potential for being a candidate for restoration and enhancement.

- 6) Priority Habitats and Species, Natural Heritage Program, and Other Programs. This site contains many habitats and species that should be recognized and supported by various state and federal programs. The lack of prior recognition is simply a result of no data collection.

Summary and Recommendations

The brief review of selected habitat values for this paper simply scratches the surface in describing or understanding the complexities of the marine ecosystem in Puget Sound and offers only a glimpse of the total value of Blakely Harbor. However, considerations for development actions at the Blakely Harbor park site should be taken in the context of the overall quality of marine habitat remaining on Bainbridge Island. The marine shorelines of Bainbridge Island have been heavily altered by development. One of the most important points to be made regarding the Blakely Park site is that it is one of the last areas left that retains relatively high resource values because of the low level of recent development. Furthermore, it offers good opportunities for restoration. From an island perspective, or even a more regional perspective, this is one of the few places remaining that retains some of the natural characteristics one would expect to find in an embayment. Based on personal observations, I cannot think of another place like Blakely Harbor on Bainbridge Island.

The Park District is faced with the difficult task of weighing various human access needs, historical values, and resource values. In their deliberations they should consider the following:

- 1) There are no other places that contain such diverse and rich resource values on Bainbridge Island.
- 2) There are multiple collaborative opportunities (and needs) to protect, enhance, and restore critical habitat for salmon and other marine species, ecosystem processes, and functions.
- 3) There are multiple local planning efforts that should be a part of the equation when evaluating actions at the park (or anywhere else). The City should have a broader plan for the marine environment and should not be allowing habitat degradation on one hand, while increasing efforts for habitat restoration on the other.
- 4) The current proposal to retain the jetties and power generation structure retains historical impacts and continues to degrade habitat and proper functioning conditions. It also sends the wrong message to park visitors by showing them that it is ok to modify sensitive areas.
- 5) There is a multitude of alternative methods for retaining the historical values of the site other than retaining structures that cause habitat degradation.
- 6) Regardless of the plan that is developed and implemented, additional human use will increase the likelihood of impacts to natural resources.

I firmly believe that the Blakely Harbor site offers the Park District and the City of Bainbridge Island one of the last opportunities to provide for a marine park that is both educational and recreational, and a site where high value restoration opportunities exist. We are an island surrounded by marine waters and our citizens, in general, know little about the wondrous habitats, species, and values it offers. A well-developed and thoughtful plan for this park has the potential to serve multiple purposes and serve as an example to others how parks can preserve natural values while allowing for certain types and levels of human use. This approach offers incredible educational, research, and restoration opportunities and gives our citizens the opportunity to learn from, and take pride in a conservation action that could last for generations.

In order to make the most of existing resource values and potential future values, I recommend removing the jetties and allowing natural processes to reshape the shoreline. Some enhancement may be required. I also recommend removing the power generation building, which sits in the middle of the salt marsh. There are a number of other historical landmarks that could be used to reveal the historical use of the site, and there are also innumerable methods of providing a historical perspective that are not environmentally degrading. Boardwalks, signage, and markers should be used to educate visitors and keep them out of sensitive areas. Every effort should be made to link restoration efforts in the stream, and educational programs at the Puget Sound Environmental Learning Center with the park plan. If done properly, we may someday begin to see a balance between human use and the health of our living marine resources.

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FUNDING OPPORTUNITIES
 Blakely Harbor Park – Conceptual Plan
 November 2001

Agency	Type of Grant	Application Due
DNR	Aquatic Lands Enhancement Acct. – for increasing public access to water	5/1/02 (biennial cycle)
DOE	Coastal Zone Management Fund – highest priority for master program amendments that address GMA integration. Also funds small public access projects.	Nov. to Jan.
DOE	Remedial Action (Hazardous Waste Sites)	On-going
DOE	State Revolving Fund – Water Pollution Control – estuary protection and preservation	Jan – Feb.
IAC	Local Park and Wildlife	5/1/02
IACOR	Salmon Recovery Board	unknown
IACOR	Washington Wildlife and Recreation Program – acquisition and improvements for habitat and outdoor recreation	5/1/02
NRCS	Watershed Protection and Flood Prevention – water quality, water-based recreation, fish and wildlife development	no formal process
Puget Sound Water Quality Action Team	Public Involvement and Education Fund -Protect Puget Sound and raise awareness	unknown
US COE	Planning Assistance to States – financial and technical support for fish and aquatic habitat improvement studies	October
US COE	Stream Bank and Shoreline Protection Studies to develop and construct stream and shoreline protection projects	on-going
US F&W	WA State Ecosystem Conservation Program – restore and enhance previously impacted wetlands, riparian and upland habitats on private lands; restoring lost wetlands.	call

BUILDING DESCRIPTIONS

Blakely Harbor Park – Conceptual Plan
November 2001

Restroom Structure

The restroom will be located near the parking and adjacent to the pedestrian pathway. The building is 16' wide by 16' long, with an 8 foot roofed porch and two 8'x8' toilet rooms. Each toilet room (1 per sex) has a composting toilet, a waterless hand-washing sink and a baby-changing station.

The restroom building acknowledge the historic building character of the site. The restroom should clearly be a contemporary addition with 'historic' qualities and should not be "disguised" as an older structure. The building will be of wood construction with timber porch columns, wood siding, and a shake roof.

When design documents are developed for the park, the type of toilet fixture and handwash to be provided will be determined. Composting toilets are to be consistent with the goals of the planning goals of the park - to "tread lightly" on the site and present an active example of stewardship.

The materials and methods of construction will also be refined during the development of design documents. The use of recycled or salvaged lumber and best sustainable practices will be explored including an evaluation of life-cycle and environmental costs.

Concrete Generator Building

A report by Coughlin Porter Lundeen Engineers dated in January 2000 establishes that the generator building is structurally sound with only limited improvements required.

The Conceptual Plan calls for the building's reuse as an covered and non-enclosed interpretive area. General improvements include:

- Infill the large equipment openings in the floor of the structure to create one large floor area. (Leave a trace, or palimpsest, of those openings so that their locations and uses can be indicated.)
- Install railings at the existing openings, leaving them clear otherwise to allow access and views. Create railings and guardrails with artists and artisans to add a sculptural element to the enclosure. These should not be disguised as "original" or "old" elements, but acknowledged as modern contributions to the safe use of the building.
- Cut apertures - strategically placed, which can be used to view the locations of historical site elements.
- Structural and seismic repairs as recommended by the CPL report. Paint and re-surface the building for weather protection. Provide photos of the building at different stages of its life (including the last few years) for visitors to discuss and recall.
- And as an option to be discussed in the design phase - install a metal rail at the finish floor elevation around the outside of the building for maintenance and to allow community expression 'grafitti'.

The building will be accessed on its west side by a boardwalk and trail from the parking area.

PRELIMINARY PROJECT CONSTRUCTION COSTS

BLAKELY HARBOR PARK - CONCEPT PLAN
Bainbridge Island Parks and Recreation District
November 2001

	Quantity		Unit Costs	Cost
Site Prep/Clearing	120,000	SF	0.25	30,000
Site Grading	10,000	CY	9.00	90,000
Asphalt Paving (Parking/Beach Trail)	8,000	SF	2.50	20,000
Gravel Trails	18,000	SF	1.50	27,000
Site Fences/Rails	6,000	LF	20.00	120,000
Bridges	3	EA	20,000.00	60,000
Wood Boardwalk	3,000	SF	40.00	120,000
Site Utilities			LS	250,000
Restroom (See attached detail)			LS	40,000
Generator Bldg. Imprvmts. (See attached detail)			LS	200,000
Kayak Storage			LS	10,000
Site Mitigation	60,000	SF	1.30	78,000
Planting	85,000	SF	2.00	170,000
Temporary Irrigation	85,000	SF	0.50	42,500
Site Furniture (Lighting/Benches/Gates/etc.)			LS	100,000
Wayfinding			LS	20,000
Interpretives				300,000
High	500,000			
Med	300,000			
Low	100,000			

Estimated Project Construction Cost 1,677,500

NOTE:

This preliminary estimate of construction costs includes contractor overhead and profit but does not include District fees including testing, administration, professional design fees, permits, or operations costs.

This estimate is based on 2001 costs.



Workshop #1 – Meeting Notes

Blakely Harbor Park – Concept Plan

20 February 2001

Attending at Strawberry Hill:

Perry Barrett	Bainbridge Island Parks
Bart Berg	Bart Berg Landscape
Wayne Daley	Daley Design – Fish and Wildlife
Jan Eakins	Communications Strategies
Terry McLaughlin	Puget Sound Environmental Learning Center (PSELC)
Joan Piper	Bainbridge Island Historical Society
Alissa Rupp	Architect, The Portico Group
Kent Scott	Landscape Architect and Associate Principal, The Portico Group
Nate Thomas	Architects Thomas, The Citizen’s Committee
Tom von Schrader	Civil Engineer and Principal, SvR Design
Yolanka Wulff	Attorney/Washington Water Trust/Bainbridge Island Planning Committee

Workshop Overview:

1. This first workshop explored expectations and goals for the park site.
2. The process for the development of the concept plan was presented.
3. Several Citizens Group Committee Members were not present although Craig Snyder submitted a brief statement.
4. Comments from other stakeholders were not presented.
5. The notes below **A, B**, etc. below are a record of the discussions/statements during the workshop.

Workshop Summary:

1. The park site should relate both the cultural and natural history of the site – the balance and elaboration of the stories are to be determined.
2. The site should be linked to other related places on and off island.
3. Change is an important planning and design element – relate the significant natural and cultural events on site and how they have manifest themselves – use this to instigate discussion of the future and visions for the park
4. Developing the park using green or sustainable design criteria is important
5. The method of interpretation should be ‘light’ and not detract from the natural quality of the site.
6. The program elements were not discussed – either in specifics or qualities.

A. Expectations/observations on the site’s neighbors, surroundings, and context

1. Look to future acquisitions to inform project planning
2. Concern about the “visual basin” of the site, with a gem in the middle (the park)
 - Viewshed mapping, protection – ownership has been the primary vehicle for this (no ordinance)
3. Uses at north slope will be key – 60 acres there
4. Traffic – safety *and* auditory issue
 - Traffic noise is an issue – mitigate this experience
 - Shipping noise from Puget Sound can be present
 - Possible to work with traffic calming devices – work with city
5. Examine curriculum links with neighboring PSELC, as well as schools, Historical Society

B. Expectations for an approach to the site through design:

1. Importance of a “soft” approach – respecting natural quality of the site.
2. Environmental Preservation on the site suggests the need for both *learning* and *quiet*
3. The park is public now – a sign is up, so it needs but there is concern of public perception of a park – of damage by public use
4. Be gentle and careful on the site; encourage gentle and careful visitation, exploration



5. Protecting historical elements of site is important – discussion of how to make the site accessible while limiting unwanted ‘wear’
6. Impact is a concern, like at Bloedel reserve.
7. Note that when Gazzam Lake first opened use was intense but it quickly dropped off.
8. Develop and enhance habitat first - educate about the resource – quality over quantity of interpretation
9. Include island kids (teens) in discussion of approach to the site – get their ideas, priorities, and understand this ad hoc group. They have no organization.
10. Don’t romanticize the graffiti – if this is a picnic place, kids won’t be as interested. Graffiti is a layer.
11. The site could teach history, but a light hand is appropriate here as well.
12. Watershed awareness is important – the site has to be its own good water steward, and information on the site can encourage other people to protect the watershed they live in.
13. Restoration is important
14. Ecologically sensitive work on the site – we can use sustainable practices and development
15. Important questions:
 - Who is this park for?
 - How many people is too many for a “nature” experience?
 - How do we balance restoration with inviting people onto the site?
16. Remember the expectations of private donors
17. Historical education needs to be integrated with environmental learning – not either/or

C. Site character observations, comments

1. Initial assessment of existing historic trees found that there are no major “historical” species but some specimens and groups that may be worth interpreting.
2. Nature has changed this site over time, even since humans changed it drastically.
3. There is a lot going on, given that this is a small site
4. Access to the Puget Sound
5. Long term legacy of history, human impact, cultural uses and now environmental stewardship
6. Tides are important at site. The water rushes at the outlet of the jetty – pulsing cycles. Also shipping waves generate low frequency waves hitting the beach.
7. Logging was here once, but long-term impacts have been covered by nature (no PCB’s or creosote here...)
8. It is still fragile here, however.

D. Historic/cultural character of site

1. Cultural history – a hundred years ago this site housed the Boeing and Microsoft of their time
 - Contributed to statehood
 - Industrial growth
 - Growth of Puget Sound region
 - Decline of the Suquamish culture
 - Impacts on salmon, etc
 - Patterns of immigration from Asia
2. There was a series of dramatic changes, and then the mill disappeared
 - What happened when logs were processed and shipped? Where did they go?
 - There was a connection to world markets from this spot.
3. Change is a story too – stewardship is about protection *and* change.
4. The site has touched many households on the island, and has a long “family tree” related to:



THE
PORTICO
GROUP

- Boats
 - Houses
 - Relatives associated with site
 - Agriculture
 - Cemetery
5. Wood from the site shipped all over the world
 6. Significance on the site for other cultures
 - Native Americans
 - Japanese Americans
 - Chinese Americans

E. Potential uses on the site – concerns and comments

1. Challenge to fully use the 20 acres, including Zone 2 (Zones are based on grants and acquisition conditions)
2. The whole park is great for birders, especially spring and fall. It would be great to find a good way to teach people how to see the birds – not just signs with pictures of animals.
3. Kids USE this site now – they have a strong appreciation for the spot
4. Education is important on many levels – there are island kids who don’t understand the tides.
5. Need to get public expectations on the table. Some divisive issues:
 - Boats
 - Dogs
 - Bikes
 - Other wheels
 - Horses
6. Nice way to be on site is to be walked around by an “expert” with a different story from each discipline:
 - Environmentalist
 - Historian
 - Archaeologist
7. But personal experiences reach small numbers, only – this is difficult
8. School programs can damage habitat, and the value of this isn’t clear with large class groups.

F. Partnership Opportunities

1. Explore partnership with PSELC – ongoing sharing of programs, information
2. Network with other sites on the island and in Puget Sound
 - Mapping/Publications
 - Audio?
3. Common threads at each site
4. Example – School’s otter trail model
5. There are off-site interpretive opportunities
 - Historical Society?
 - Audio tours?
 - PSELC?
 - Schools?
 - Other parks?



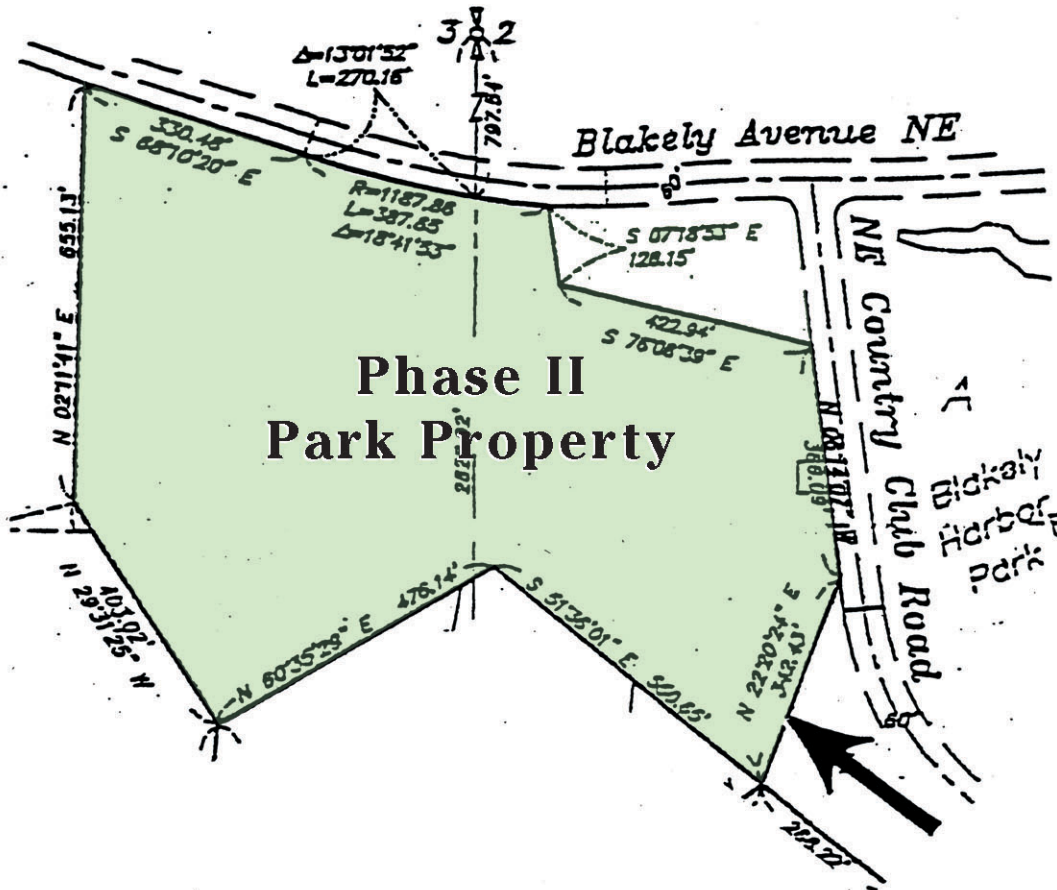
Public Comment

Blakely Harbor Park – Conceptual Plan
November 2001

Below is a summary of public comments organized by date. The complete narrative from each comment is available in the Park District office.

5-24-00	Craig Synder	Charratte for Blakely
2-24-01	Terry McLaughlin @ PCELC	Importance of Japanese and Phillipino stories, interpretive education, ecological timeline, PSELC kayak storage
3-25-01	Jan Eakins	Cultural landscape elements
4-1-01	Gerald Elfendahl	Historical components and Craig Snyder's Charratte
4-3-01	Gerald Elfendahl	Historical components
4-12-01	Rachel Smith	Wildlife components, meadow and invasive species
5-9-01	Kent Scott	Site visit: Jim Brennan and Blakely's jetties
5-10-01	Nate Thomas	Bridge, north shore platform, and jetty
5-11-01	Nate Thomas	Preliminary design phase
5-14-01	Andy Marion	Concrete structure, reflecting earlier era elements
5-20-01	Chuck Kirchner	Kayak access, meadow, jetties, boardwalk, and interpretative center
5-14-01	Kim Bottles	Concrete structure and no graffiti
5-20-01	Rachel Smith	Signage, and signage facing the harbor for water access
5-22-01	Sharon Soames	No graffiti, favors portrayal of history or art work stations in concrete structure
5-22-01	Ray Stevenson	Zone 3 of the CC&RS, no footbridge
5-23-01	Sharon Soames	No graffiti
5-23-01	Alan Black	Open meadow, preserve existing jetties, concrete structure, salt marsh boardwalk
5-24-01	Joan Piper, BIHS	Preservation of the log pond and jetties
5-25-01	Rachel Smith	Clivis multrum composting toilets
5-26-01	Bob Smith	Harbor arrivals
5-26-01	Rachel Smith	Wildlife Plantings
5-27-01	Trina/Marc LaRoche	Jetty, loop trail, picnic, grassy mowed areas, demolish existing machine building
5-28—01	Maggie Smith	Jetties, north preserve, south breach, supports concrete structure and art, boat pathway, reestablish meadow while maintaining the trees planted during mill town era, boardwalk.
5-29-01	Lisa Pelly	Proposes forum: fish and jetty removal, meadow and landscape elements/ scotch broom, art, use of the brick
6-04-01	Jim Brennan	Background information on resources and resource values /Blakely, removal of jetties and support of the natural system and shoreline

Phase II Park Expansion
Blakely Harbor Park - Conceptual Plan
November 2001



Blakely Public Workshop #1 31 March 2001

Attendance:

Bob and Rachel Smith
Frank Kitamoto
Curt Winston
Nate Thomas
Susan & Kim Bottles
Tom Van Schrader
Alan Black

Al Philips
Frank Stowell
Richard Wilson
Joan Piper
Lisa Pelly
Richard LaBotz
Maggie Smith

With Portico and BIPRD staff

Presenters: Nate Thomas, Chair, Kent Scott, Portico and T. Perry Barrett, BIPRD staff

Over view from Participants Efforts and Work Shop I:

From Workshop I participants reflected in the aerial workshop products three major thoughts. Use of a 'light hand' in the design, provide for natural and cultural interpretation, and desirable elements include parking, trails, restroom and enhancement of the site.

Other design elements include keeping the jetties for historical interpretation. The generator building constitutes a division among workshop participants as well as preferences to keep some or all of the graffiti. One suggestion is to keep the generator building and to expand its current use to include a venue for cultural interpretation. Here, the use of portals created in the cement walls will emphasize connection to the bay as well as 'tell the story' of the harbor and it's various eras.

The masonry building at Seaborn was not seen as critical to the park site. Independently from the workshop, consultants familiar with moving brick buildings confirmed that the structure was at risk of collapsing if moved.

Another discussion element was whether a footbridge ought to span the jetties. Wetland buffers around the generator building suggest that this building and jetty be approached with a boardwalk. This does two things. One, it raises the viewing area. Two, it elevates the visitor into the actual opening of the generator building/ proposed interpretation area. As it exists now, this opening is about 6' above the ground. One suggestion was to use something similar to a cart tram way (flying box) instead of a footbridge.

There was little interest in creating a loop trail at the park from workshop 1 and subsequent correspondence. Instead, a network of primary and secondary trails was described. The suggested carrying capacity generally is recommended at about one classroom per setting and a maximum of 150 people on the site at any given time.

An innovative thought and septic issues related to using a composting toilet in lieu of traditional restroom development.

Discussion followed pertaining to Endangered Species Act and salmon habitat issues. One suggestion advocated a bridge over the jetties to provide for an over water bridge structure here that could open or close related to salmon season. Built as such, this bridge might reduce the shading effect created by having a solid structure built over the water. Concern for the line of sight and bridge's probably height related to state permitting standards diminished interest in this idea.

Highlighting Trails and Key Park Features:

Description of trails and the linked park features followed. Rules pertaining to etiquette will be posted and picnic areas designated.

Parking for 20 vehicles is recommended with a submerged grade.

Restroom and kayak storage area are to invoke period services buildings typical of the mill town era.

The proposed loop trail to the west of the parking area and along the mill pond is recommended to be cut below Blakely Av and reduce adjacent road traffic noise while eliminating the sight of oncoming cars. Trail features here would emphasize the views overlooking the pond for the park user.

Continuing this trail connection to the north end of the millpond, the ideas discussed provide for a short bridge across the creek. This area, and landscape fringe areas adjacent to the meadow provide for views through unique apple trees that are remnants of the Japanese settlers about a hundred years ago. This bridge too was the subject of workshop attendees discussion pertaining to salmon and habitat issues.

The generator building is proposed to become a type of portal in time/experience destination. "Portals" carved inside the structure that acts to telescope the view while interpretation there will describe events, circumstances and the natural system. The generator structure will be connected to the parking area by a boardwalk intended to protect key salt-water marsh areas nearby.

Secondary trails lead to the southern beach area.

Storylines, Signage and Narration:

General park information signs should include ownership, lists of grantors and contributors, rules of etiquette and water access.

Building and site area identification will depict:

- Mill manager's house
- Cookhouse
- Worker's housing
- Renton House
- Campbell House
- Bachelor's Headquarters
- Burner/ generator

Storyline themes communicate:

- The notion of change and communicating / promoting examples of stewardship.
- Communicating the stories of everyday experience from previous times, e.g. Suquamish, logger, and mill worker and communicating these to related world events at the time.
- Also other themes include, nature mapping, salmon, habitat issues and sustainability.